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## EC79-104 Performance of Soybean Varieties in Nebraska 1978

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*Institute of Agriculture  
and Natural Resources*

# PERFORMANCE OF SOYBEAN VARIETIES IN NEBRASKA 1978

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Extension work in "Agriculture,  
Home Economics and subjects relating  
thereto," The Cooperative Extension Service,  
Institute of Agriculture and Natural Resources,  
University of Nebraska-Lincoln, Cooperating with  
the Counties and the U.S. Department of Agriculture  
Leo E. Lucas, Director

The Agricultural Experiment Station  
Institute of Agriculture and Natural Resources  
University of Nebraska-Lincoln  
H. W. Ottoson, Director



## EXTENSION CIRCULAR 78-104

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## FOREWORD

This circular is a progress report of soybean variety trials conducted by the variety evaluation and soybean breeding projects of the Agricultural Experiment Station. Cooperating were the Agronomy Department and the Northeast, South Central and North Platte Stations. These Extension Circulars replace the Outstate Testing Series. Conduct of experiments and publication of results is a joint effort of the Agricultural Experiment Station and the Cooperative Extension Service.

Acknowledgment is made to station personnel, county extension agents and others who assisted in the conduct of these tests. Special acknowledgment is made to Fred Gauchat, Bettger Brothers and Frank Svoboda for furnishing land and caring for the Nemaha, Fillmore and Rock County trials, respectively.

## THE METRIC SYSTEM

The United States is committed to changing to the metric system of weights and measures. This conversion will take time and there will be some confusion until the metric system becomes more familiar. Measurement data in this circular are given in commonly used U.S. units followed by the metric units in parentheses ( ).

Among the equivalents are:

1 millimeter (mm)	=	0.0394 inches
1 centimeter (cm)	=	0.394 inches
1 hectare (ha)	=	2.471 acres
1 kilogram (kg)	=	2.205 pounds
1 metric ton (t)	=	2,204.6 pounds

Conversion factors used in this circular were as follows:

mm	=	inches x 0.254
cm	=	inches x 2.54
ha	=	acres x 0.405
kg	=	pounds x 0.454
kg/ha	=	bu/A x 67.26 (60# bu)



# NEBRASKA SOYBEAN PRODUCTION

The following data were obtained from Nebraska Agricultural Statistics. In 1940, 13,000 acres of soybeans were also cut for hay.

Year	Harvested acres (ha) 000	Average yield bushels (kg/ha)	Production bushels (metric tons) 000
1940	4 ( 2)	14.0 ( 942)	56 ( 1)
1950	50 ( 20)	24.0 (1614)	1,200 ( 30)
1955	180 ( 73)	10.5 ( 706)	1,890 ( 48)
1956	146 ( 59)	11.5 ( 773)	1,679 ( 43)
1957	142 ( 58)	26.0 (1749)	3,692 ( 94)
1958	206 ( 83)	29.0 (1951)	5,974 ( 152)
1959	146 ( 59)	24.0 (1614)	3,504 ( 89)
1960	164 ( 66)	28.0 (1883)	4,592 ( 117)
1961	292 (118)	25.5 (1715)	7,446 ( 189)
1962	310 (126)	27.0 (1816)	8,370 ( 213)
1963	356 (144)	28.5 (1917)	10,146 ( 258)
1964	523 (212)	22.0 (1480)	11,506 ( 292)
1965	696 (282)	23.5 (1581)	16,356 ( 415)
1966	745 (302)	29.5 (1984)	21,978 ( 558)
1967	782 (317)	22.5 (1513)	17,595 ( 447)
1968	782 (317)	23.5 (1581)	18,377 ( 467)
1969	766 (310)	33.5 (2253)	25,661 ( 652)
1970	812 (329)	22.0 (1480)	17,864 ( 454)
1971	609 (247)	25.0 (1682)	15,225 ( 387)
1972	746 (302)	33.0 (2220)	24,618 ( 625)
1973	1,210 (490)	30.0 (2018)	36,300 ( 922)
1974	1,190 (482)	24.0 (1614)	28,560 ( 725)
1975	1,200 (486)	27.0 (1816)	32,400 ( 823)
1976	980 (397)	20.0 (1345)	19,600 ( 498)
1977	1,130 (458)	36.0 (2421)	40,680 (1033)
1978	1,250 (506)	34.0 (2287)	42,500 (1080)

# NEBRASKA - SOYBEAN VARIETIES

Estimated percentage of total acreage planted to each variety, 1973-1977.

Variety	% of acreage				
	1973	1974	1975	1976	1977
Amsoy 71 and Amsoy	24.2	23.1	23.1	19.3	21.7
Williams	1.8	9.4	16.7	16.9	20.6
Wayne	17.1	15.2	13.2	13.8	11.0
Beeson	14.0	11.6	11.4	10.3	10.2
Calland	9.5	9.3	9.2	8.3	6.6
Woodworth	----	----	.1	1.7	4.8
Clark 63 and Clark	5.8	3.9	3.1	2.4	3.9
Wells	----	.2	1.6	2.7	3.0
Corsoy	2.9	3.3	2.8	4.6	2.8
Cutler 71 and Cutler	5.4	5.1	1.9	1.9	2.8
Hawkeye 63 and Hawkeye	3.1	2.0	2.2	1.7	1.4
Kent	.4	.4	.3	.5	.5
Bonus	1.0	1.1	1.3	1.1	.4
Harcor	----	----	----	----	.2
Private Varieties	9.1	11.3	11.4	14.4	9.8
Other	5.7	4.1	1.7	.3	.3



PERFORMANCE OF SOYBEAN VARIETIES  
IN NEBRASKA  
1978

The November 1 estimated yield of soybeans in Nebraska was 34 bushels per acre (2287 kg/ha) from 1,270,000 acres (514,350 hectares). Total production and the harvested area represent new records.

The 1977 season was generally fairly favorable for soybeans in Nebraska. Planting and crop progress were slightly behind normal. September weather was favorable for ripening and rapid harvest. Yields by Crop Reporting Districts were as follows (Nov. 1 forecast):

	<u>Yield, bu/A (kg/ha)</u>	
	<u>1977</u>	<u>1978</u>
Northwest	-----	-----
North	29.0 (1951)	27.0 (1816)
Northeast	36.6 (2462)	33.0 (2220)
Central	36.1 (2428)	35.0 (2354)
East	36.0 (2421)	34.6 (3327)
Southwest	32.3 (2172)	24.0 (1614)
South	34.0 (2287)	29.0 (1951)
Southeast	35.0 (2354)	35.0 (2354)
State	36.0 (2421)	34.0 (2287)

Some characteristics of soybean varieties included in current Nebraska tests are shown in Table 1.

Most soybean varieties in the corn belt are of the indeterminate type. These begin flowering in response to day length. Flowering and growth continue until pod set is complete.

Maturity ratings shown in Table 1 are indicated as days earlier or later than Wayne. Maturity is defined as the time 95% of the pods have turned brown. This would be about a week to 10 days ahead of harvest.

Resistance to lodging is affected by local environmental conditions. Varietal response to lodging may differ with changing irrigation schedules. High plant populations increase susceptibility to lodging.

Soybean varieties differ in their ability to emerge under unfavorable conditions. These are not a factor when seeding conditions are good but may become important when soil crusting or deep planting conditions exist.

Phytophthora root rot has not been a factor in Nebraska. It is important in states farther east.

Table 1. Characteristics of soybean varieties.

Variety	<u>1/</u> Maturity	Lodging resistance	Emergence score	Color				Phytophthora <u>2/</u> rating	Seeds	
				Flower	Pubescence	Pod	Hilum		per lb	(kg) <u>3/</u>
Hodgson	-15	Good	Poor	Purple	Gray	Brown	Buff	S	----	----
Hark	-12	Good	Good	Purple	Gray	Brown	Yellow	S	----	----
Coles	- 8	Good	Good	Purple	Gray	Brown	Yellow	S	----	----
Corsoy	- 8	Fair	Good	Purple	Gray	Brown	Yellow	S	3060	(6740)
Vickery	- 8	Fair	Good	Purple	Gray	Brown	Yellow	R	3100	(6830)
Harcor	- 8	Fair	Good	Purple	Gray	Brown	Yellow	R	3100	(6830)
Wells	- 8	Good	Fair	Purple	Gray	Brown	Imp. black <u>4/</u>	R	2840	(6260)
Wells II	- 8	Good	Poor	Purple	Gray	Brown	Imp. black <u>4/</u>	R	2780	(6120)
Amsoy 71	- 7	Fair	Poor	Purple	Gray	Tan	Yellow	R	2900	(6390)
Nebsoy	- 7	Good	Good	White	Gray	Brown	Buff	R	2740	(6040)
Beeson	- 6	Good	Poor	Purple	Gray	Brown	Imp. black <u>4/</u>	R	2570	(5660)
Sloan	- 4	Fair	Poor	White	Tawny	Brown	Brown	S	2910	(6410)
Wayne	0	Fair	Good	White	Tawny	Brown	Black	T	2830	(6230)
Woodworth	0	Good	Poor	White	Tawny	Tan	Black	T	3190	(7030)
Cumberland	+ 1	Good	Good	Purple	Gray	Brown	Imp. black <u>4/</u>	S	2680	(5900)
Oakland	+ 1	Good	Fair	Purple	Gray	Brown	Imp. black <u>4/</u>	R	2500	(5510)
Calland	+ 3	Fair	Good	Purple	Tawny	Brown	Black	R	2780	(6120)
Elf	+ 5	Excellent	Good	Purple	Brown	Tan	Black	S	2980	(6560)
Williams	+ 5	Good	Poor	White	Tawny	Tan	Lt. black	T	2800	(6170)
Union	+ 6	Good	Fair	White	Brown	Tan	Black	R	2710	(5970)
Bonus	+ 6	Good	Poor	Purple	Gray	Brown	Imp. black <u>4/</u>	R	2920	(6430)
Cutler 71	+ 7	Good	Poor	Purple	Tawny	Brown	Black	R	2850	(6280)
Kent	+12	Good	Good	Purple	Tawny	Brown	Black	S	----	----

1/ Approximate days earlier - or later + than Wayne, varies with season and location.

2/ Race 1. There are many races of phytophthora root rot.

3/ Varies greatly with season and location. Data shown are average of irrigated and nonirrigated tests, 30-inch (76 cm) rows, at the Mead Field Laboratory, 1976-1978.

4/ Black with brown ring around edge.



Table 2. Suggested soybean varieties for Nebraska.

Southeast	South Central	Central and Southwest*	East Central	Northeast
Wayne	Corsoy	Corsoy	Corsoy	Corsoy
Woodworth	Harcor	Harcor	Harcor	Harcor
Cumberland	Wells	Wells	Wells	Wells
Calland	Amsoy 71	Amsoy 71	Amsoy 71	Amsoy 71
Williams	Nebsoy	Nebsoy	Nebsoy	Nebsoy
Bonus	Beeson	Beeson	Beeson	Beeson
Cutler 71	Wayne	Wayne	Wayne	
	Woodworth	Woodworth	Woodworth	
	Cumberland	Cumberland	Cumberland	
	Calland	Calland	Calland	
	Williams	Williams	Williams	

\* Primarily on irrigated land

Suggested soybean varieties for Nebraska are shown in Table 2. Newly released varieties may be added to the list when more information becomes available. Varieties are listed in order of approximate maturity. Nebraska trials include only varieties of Experiment Station origin. Many privately developed varieties are being marketed.

#### SOYBEAN DATA

Soybean variety tests were conducted in 8 areas of Nebraska as follows:

1. Northeast Station, Concord
2. Dodge County
3. Mead Field Laboratory
4. Agricultural Experiment Station, Lincoln
5. Nemaha County
6. South Central Station
7. North Central Irrigated
8. Southwest Irrigated

Data are not available for all areas in all years. Several experiments are located in some areas. Current and/or periods of years data from each location are shown in Tables 3 through 21.

Eight soybean varieties listed represent relatively new releases. These are Vickery, Wells II, Nebsoy, Sloan, Cumberland, Oakland, Elf and Union.

Vickery is the result of a Corsoy backcross made in Iowa. The purpose of the cross was to add resistance to several races of Phytophthora root rot resistance to Corsoy. It is a Group II variety and is similar to Corsoy in appearance, agronomic performance, seed composition, and disease resistance except for Phytophthora.

Wells II is a backcross derivative of Wells that is resistant to additional races of phytophthora root rot. It was developed in Indiana. It is a Group II maturity, identical to Wells, with resistance to additional races of Phytophthora.



Nebsoy represents the first soybean variety released by the Nebraska Agricultural Experiment Station. It was selected at the Mead Field Laboratory from a cross made at Purdue. Nebsoy is of Group II maturity, similar to Amsoy 71. It has consistently been superior to Amsoy 71 and Beeson in seed yield. It is consistently been superior to Amsoy 71 and Beeson in seed yield. It is 3 to 6 inches (8-15 cm) shorter, has better lodging resistance and slightly better seed quality than either. Also, Nebsoy rates higher in seed emergence under unfavorable conditions. Seed will not be available until the 1980 planting season.

Sloan was developed in Iowa. It is of Group II maturity, similar to Beeson. In regional trials, Sloan was exceeded Beeson in yield, lodged slightly more and had smaller seeds.

Cumberland was developed in Iowa from the cross Corsoy x Williams. Cumberland is of Group III maturity as are Woodworth and Williams. Seed size has exceeded Woodworth and Williams and yield performance in regional trials was superior. Certified seed is available in limited amounts in amounts in Nebraska for 1979 plantings.

Oakland also is of Group III maturity of Calland or Woodworth maturity. It was selected in Iowa for resistance to race 1 of Phytophthora. Oakland should offer improved yield and lodging resistance over Calland.

Elf is a 1977 release selected in Illinois from the cross Williams x Ransom. It came from a breeding program directed toward the development of high-yielding, lodging-resistant, semidwarf soybean varieties. Elf is the same maturity as Williams but about one-half as tall. Its chief advantage over Williams is greater lodging resistance and higher yields in favorable environments where Williams lodges. The greatest yield advantage has been in high yield environments with slightly increased planting rates and 7-inch (18 cm) rows. The short stature may cause increased harvest losses. Elf has not performed well under stress conditions.

Union was selected in Illinois from a backcross of Williams x a strain to add phytophthora resistance. Union is early Group IV maturity, earlier than Cutler 71 and later than Williams. Seeds are slightly larger than Williams. Plant appearance is similar to Williams and Woodworth except for later maturity.

Yield comparison summaries including Vickery, Nebsoy, Sloan, Cumberland, Oakland and Union follow. Maturity is the number of days from planting to physiological maturity. Most of the trials were at the Mead Field Laboratory in 1977-1978 and included both irrigated and nonirrigated comparisons.

<u>Variety</u>	<u>Yield</u> <u>bu/A (kg/ha)</u>	<u>Maturity</u> <u>days</u>	<u>Lodging</u> <u>score</u>
15 Tests			
Corsoy	45.3 (3047)	119	2.0
Vickery	43.4 (2919)	119	2.4
Harcor	46.0 (3094)	120	2.2
Nebsoy	48.1 (3235)	122	1.3
Beeson	42.9 (2885)	122	2.1



<u>Variety</u>	<u>Yield</u> <u>bu/A (kg/ha)</u>	<u>Maturity</u> <u>days</u>	<u>Lodging</u> <u>score</u>
14 Tests			
Harcor	45.6 (3067)	120	2.3
Amsoy 71	44.4 (2986)	122	2.2
Nebsoy	48.1 (3235)	122	1.4
Beeson	42.5 (2859)	122	2.1
Sloan	46.2 (3107)	123	2.5
13 Tests			
Cumberland	46.5 (3128)	127	1.7
Woodworth	45.0 (3027)	128	1.6
Oakland	46.4 (3121)	128	1.5
Calland	43.4 (2919)	130	1.9
Williams	43.8 (2946)	132	1.6
12 Tests			
Williams	44.0 (2959)	132	1.6
Union	42.6 (2865)	134	1.9

### Testing Procedure

Soybeans were planted in 4-row plots replicated 4 times. Rates of 8-10 beans per foot of row were used. This produces good stands under favorable conditions for emergence. Seeding rates for the variety Elf were increased 50%. Row spacing varied with location and years. Recent row spacings have generally been 30 inches (76 cm).

Yields were calculated in bushels per acre at 60 pounds per bushel and 13% grain moisture. Yielding ability of different varieties cannot be measured with absolute accuracy because of variations in soil fertility, moisture and other factors. For this reason small differences in yield have little significance. Yield differences require for significance are shown in each of the data tables. Unless the difference in yield of 2 varieties is greater than this difference, little confidence can be placed in the superiority of one over the other in that particular test. These differences are shown at the 5% level, meaning that differences as large or larger could be expected through chance alone in 1 of 20 trials.

Plant height measurements were taken at harvest. Lodging scores are based on the erectness of plants at maturity. A score of 1 represents nearly all plants erect and a score of 5 indicates all plants down.

Seed quality scores were determined at several locations. Scores are based on the appearance of the seed from the standpoint of wrinkling, growth cracks, color and mold damage. Scores range from 1 = very good to 5 = very poor.

Seed size is indicated as grams per 100 seeds. Smaller beans have more seeds per pound. Varieties differ in inherent seed size just as they differ in yield. Some varieties are consistently larger than others. When seed sizes for a given variety grown at different locations are compared, small seed size at one location often indicates stress or failure to mature, whereas large seed size may reflect favorable growing conditions.



Northeast

Results of a no-till soybean variety test on the Northeast Station are reported in Table 3. Results under conventional tillage are shown in Table 4. Trials were in different fields and the data are not directly comparable. Yield and other data for the 1971-1978 period are shown in Table 5. Relative varietal performance was not consistent over years.

East Central

These trials were located in Dodge County. No plantings were made after 1972. Data for the 1967-1972 period are shown in Table 5. Varietal yield performance was not consistent over years.

Southeast - Mead

Four variety experiments are reported from the Mead Field Laboratory (Tables 7, 8, 9, 10). Experiments were conducted with and without irrigation and at 7-inch (18 cm) and 30-inch (76 cm) row spacings. The previous crop for the narrow rows was oats; the 30-inch (76 cm) rows followed soybeans. Three applications of water were made to the irrigated trials.

Amsoy 71, Corsoy, Elf, Harcor and Wells II were in the top yield group in both the irrigated and nonirrigated narrow row trials. Later-maturing varieties except for Elf, generally were lowest in yield in 1978.

In the 30-inch (76 cm) row trials, Elf was the top variety under irrigation but was below the average of all entries in the nonirrigated trial. Corsoy, Harcor and Vickery ranked high in both trials. Except for Cumberland, and Elf under irrigation, later-maturing varieties were generally lower than average in yield.

Nonirrigated experiments for the 1973-1978 period are summarized in Table 11. This was a period of wide fluctuations in growing conditions which are reflected in yield data. In four-year averages, 11 varieties had equivalent yield records.

Irrigated experiments for the 1973-1978 period are summarized in Table 12. In 1975-1978 averages of 11 varieties, Corsoy, Harcor and Woodworth were highest in yield and Calland, Cutler 71 and Bonus were lowest.

Southeast - Lancaster County

No data were obtained in 1978 because of hail. The 1977 data and 1976-1977 average yields are shown in Table 13. Later-maturing varieties were lowest in two-year average yields.

Southeast - Nemaha County

The 1978 trial was in the same field as the 1976 test. Stands were excellent and plants grew tall. This area was under heavy moisture stress in August. This reduced seed size and yields, especially of later-maturing strains. The average yield of 45.1 bushels per acre (3031 kg/ha) was excellent for these conditions. Later-maturing varieties were lowest in yield. Earlier-maturing varieties lodged more than usual in 1978.



Data for the 1971-1978 period are included in Table 15. Seasonal conditions differed greatly and differences in yield between 8 varieties tested for a 6-year period were nonsignificant.

#### South Central - Irrigated

Three trials were conducted under irrigation in 1978. High yields were produced in all tests (Tables 16, 17, 18). Varietal performance in the Fillmore and Clay (furrow irrigated) trials was similar. Early varieties were lowest in yield. In the Clay sprinkler irrigated trial, the varietal performance pattern was different. Later maturity was not correlated with higher yield in this trial. Relative seed size of later entries was smaller in this test. This indicates that some stress caused greater yield reduction of later than earlier strains.

Because performance varied with location in 1978, yield differences in the average of the three trials were nonsignificant (Table 19). Varieties were not consistent over years and varietal yields did not differ significantly in 4-year average yields.

#### North Central - Irrigated

Eight varieties were tested under center pivot irrigation in Rock County (Table 20). Plants were short and seed size was small. An average yield of 31.2 bushels per acre (2099 kg/ha) was produced. Varieties did not differ significantly in yield.

#### Southwest - Irrigated

Eight-year data from Southwest District irrigated variety trials are shown in Table 21. No tests were conducted in 1978. Relative varietal performance differed with seasons and 1974-1977 average yield differences of varieties were nonsignificant statistically.

Table 3. No-Till soybean variety test. Northeast Station. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)
Coles	36.0 (2420)	9-21	2.7	38 (97)
Harcor	46.4 (3120)	9-20	2.1	38 (97)
Wells	41.1 (2760)	9-21	1.0	36 (91)
Amsoy 71	39.8 (2680)	9-23	2.0	41 (104)
Nebsoy	42.0 (2820)	9-24	1.3	36 (91)
Woodworth	42.5 (2860)	9-27	1.4	38 (97)
Elf	41.4 (2780)	10-5	1.0	25 (64)
Dif. sig. (.05)	2.9 (195)	2.1	0.6	2.5 (6)

## Dixon County

Planted: May 26, 20-inch rows. Till planter with slot shoes.

Harvested: October 16

## Herbicide Treatments

1977 oats - stubble sprayed July 22, Metribuzin + Paraquat 2 + 0.5  
lb/A (2.2+0.6 kg/ha)1978 premerge, Alachlor + Metribuzin + Glyphosate, 2 + 0.38 + 0.5  
lb/A (2.2+0.42+0.6 kg/ha).



Table 4. Soybean variety test. Northeast Station. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Grams 100 seeds
Coles	42.5 (2860)	9-19	3.4	44 (112)	16.8
Corsoy	51.2 (3440)	9-19	2.8	41 (104)	15.3
Harcor	50.1 (3370)	9-21	2.6	43 (109)	14.8
Vickery	52.1 (3500)	9-21	3.0	41 (104)	14.8
Wells	48.7 (3280)	9-22	2.3	42 (107)	15.4
Wells II	47.2 (3170)	9-23	1.5	42 (107)	15.2
Amsoy 71	47.7 (3210)	9-25	2.4	44 (112)	15.7
Nebsoy	49.3 (3320)	9-25	1.9	40 (102)	16.3
Beeson	47.7 (3210)	9-30	3.3	41 (104)	17.3
Sloan	47.6 (3200)	9-25	3.0	41 (104)	15.7
Wayne	42.1 (2830)	10-2	3.1	45 (114)	15.7
Woodworth	48.0 (3230)	9-29	2.0	40 (102)	14.4
Cumberland	50.5 (3400)	9-30	2.5	41 (104)	16.9
Dif. sig.	5.5 ( 370)	1.3	0.7	3.1 (7.9)	0.9

Dixon County

Planted: May 25, 30-inch (76 cm) rows.

Harvested: October 16.

Table 5. Northeast District soybean variety tests. Northeast Station. 1971-1978. No 1974 data.

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Variety	Grain yield, bu/A (kg/ha)								1975-78 average		
	1971	1972	1973	1975	1976	1977	1978	1975-78 average	Mature date	Ldg. score	Height in (cm)
Hark	36.4 (2450)	49.7 (3340)	35.0 (2350)	32.3 (2170)	22.6 (1520)	----	----	----	----	---	--
Coles	----	----	----	----	----	50.0 (3360)	42.5 (2860)	----	----	---	--
Corsoy	39.8 (2680)	54.6 (3670)	37.4 (2520)	40.7 (2740)	24.8 (1670)	47.9 (3220)	51.2 (2440)	41.2 (2770)	9-14	1.8	31 (79)
Vickery	----	----	----	----	----	48.9 (3290)	52.1 (3500)	----	----	---	--
Harcor	----	----	----	35.7 (2400)	23.2 (1560)	49.5 (3330)	50.1 (3370)	39.6 (2660)	9-15	1.8	33 (84)
Wells	37.8 (2540)	52.8 (3550)	----	35.6 (2390)	21.7 (1460)	52.8 (3550)	48.7 (3280)	39.7 (2670)	9-16	1.5	30 (76)
Wells II	----	----	----	----	----	48.2 (3240)	47.2 (3170)	----	----	---	--
Amsoy 71	38.9 (2620)	53.8 (3620)	34.8 (2340)	36.8 (2480)	20.2 (1360)	50.9 (3420)	47.7 (3210)	38.9 (2620)	9-20	1.8	34 (86)
Nebsoy	----	----	----	----	26.4 (1780)	54.0 (3630)	49.3 (3320)	---	----	---	--
Beeson	37.3 (2510)	52.0 (3500)	36.7 (2470)	39.3 (2640)	19.4 (1300)	43.8 (2950)	47.7 (3210)	37.6 (2530)	9-22	1.9	31 (79)
Sloan	----	----	----	----	----	53.5 (3600)	47.6 (3200)	----	----	---	--
Wayne	32.2 (2170)	49.0 (3300)	40.0 (2690)	29.9 (2010)	21.1 (1420)	48.5 (3260)	42.1 (2830)	35.4 (2380)	9-28	2.0	33 (84)
Woodworth	----	----	40.8 (2740)	29.4 (1980)	19.5 (1310)	50.4 (3390)	48.0 (3230)	36.8 (2480)	9-28	1.4	31 (79)
Cumberland	----	----	----	----	----	48.5 (3260)	50.5 (3400)	----	----	---	--
Dif. sig.	4.3 ( 289)	N.S.	2.9 ( 195)	5.8 ( 390)	4.4 ( 296)	N.S.	5.5 ( 370)	N.S.	3.3	N.S.	2.3 ( 6)

Dixon County.



Table 6. East Central District soybean variety tests. Dodge County 1967-1972. No 1973-1978 data.

Variety	Grain yield, bu/A (kg/ha)								1971-72 average		
	1967	1968	1969	1970	1971	1972	1971-72 average	1968-72 average	Ldg. score	Height in (cm)	Grams 100 seeds
Hark	43.6 (2930)	41.2 (770)	50.1 (3370)	40.1 (2700)	38.2 (2570)	28.0 (1880)	33.1 (2230)	39.5 (2660)	1.0	30 (76)	14.6
Corsoy	49.6 (3340)	49.5 (3330)	51.2 (440)	44.2 (2970)	43.6 (2930)	30.6 (2060)	37.1 (2500)	43.8 (2950)	1.0	30 (76)	14.8
Wells	-----	-----	-----	-----	42.2 (2840)	32.3 (2170)	37.3 (2510)	-----	1.0	32	15.7
Amsoy 71	-----	-----	-----	44.6 (3000)	41.7 (2800)	33.7 (2270)	37.7 (2540)	-----	1.3	34 (86)	15.6
Beeson	50.2 (3380)	45.4 (3050)	56.7 (3810)	43.6 (2930)	40.4 (2720)	34.7 (3300)	37.6 (2530)	44.2 (2970)	1.2	32 (81)	17.4
Wayne	52.2 (3510)	37.6 (2530)	61.1 (4110)	48.5 (3260)	35.8 (2410)	32.6 (2190)	34.2 (2300)	43.1 (2900)	1.5	34 (86)	16.0
Calland	-----	36.1 (2430)	64.0 (4300)	52.0 (3500)	36.2 (2430)	37.3 (2510)	36.8 (2480)	45.1 (3030)	1.6	36 (91)	16.1
Williams	-----	-----	-----	-----	34.4 (2310)	36.8 (2480)	35.6 (2390)	-----	1.1	34 (86)	16.7
Bonus	-----	-----	-----	-----	31.8 (2140)	33.3 (2240)	32.6 (2190)	-----	1.5	37	15.7
Cutler 71	-----	-----	-----	-----	33.6 (2260)	35.8 (2410)	34.7 (2330)	-----	1.6	36 (91)	15.9
Dif. sig.	4.2 ( 282)	8.3 ( 558)	7.3 ( 491)	6.3 ( 424)	5.1 ( 343)	4.4 ( 296)	N.S.	N.S.	---	--	----

Table 7. Soybean variety test. Mead Field Laboratory. Nonirrigated narrow rows. 1978.

Variety	1978					1976-78 average
	Yield bu/A (kg/ha)	Mature date	Lodging score	Seed quality	Grams 100 seeds	Yield bu/A (kg/ha)
Coles	43.6 (2930)	9-19	1.9	2.5	18.1	----
Corsoy	50.8 (3420)	9-19	1.9	2.6	15.7	38.7 (2600)
Vickery	45.2 (3040)	9-20	1.9	2.3	15.5	----
Harcor	49.4 (3320)	9-21	1.9	2.4	15.5	36.8 (2480)
Wells	44.2 (2970)	9-19	1.0	3.1	16.2	35.5 (2390)
Wells II	49.7 (3340)	9-19	1.0	3.1	16.6	----
Amsoy 71	47.1 (3170)	9-20	1.8	3.0	17.2	35.8 (2410)
Nebsoy	46.2 (3110)	9-21	1.0	3.0	17.6	----
Beeson	45.0 (3030)	9-21	1.3	3.4	18.3	33.6 (2260)
Sloan	43.7 (2940)	9-25	1.8	3.6	16.2	----
Wayne	40.4 (2720)	9-26	2.1	3.5	17.4	31.3 (2110)
Woodworth	44.8 (3010)	9-29	1.4	2.4	16.0	33.1 (2230)
Cumberland	48.4 (3260)	9-29	1.1	3.1	19.2	----
Oakland	53.3 (3580)	9-29	1.1	3.0	20.6	----
Calland	45.8 (3080)	9-29	1.8	3.0	19.2	35.4 (2380)
Elf	54.1 (3640)	10-3	1.0	1.8	18.4	----
Williams	46.5 (3130)	10-1	1.4	2.4	17.9	30.6 (2060)
Union	41.9 (2820)	10-4	1.6	2.9	18.6	----
Bonus	42.2 (2840)	10-5	1.5	3.3	16.8	30.8 (2070)
Cutler 71	42.5 (2860)	10-5	1.4	2.6	16.7	30.5 (2050)
Dif. sig.	7.3 ( 491)	2.9	0.4	0.5	1.2	N.S.

Saunders County. Planted: May 26. 7-inch (18 cm) rows.



Table 8. Soybean variety test. Mead Field Laboratory. Irrigated narrow rows. 1978.

Variety	Yield bu/A (cwt/ha)	Mature date	Lodging score	Seed quality	Grams 100 seeds
Coles	48.8 (3280)	9-22	2.8	2.4	19.9
Corsoy	55.8 (3750)	9-24	2.3	2.5	16.6
Vickery	52.8 (3550)	9-22	2.6	2.6	17.1
Harcor	53.2 (3580)	9-25	3.0	2.8	17.4
Wells	49.0 (3300)	9-23	1.4	3.1	18.2
Wells II	49.7 (3340)	9-23	1.4	3.0	18.0
Amsoy 71	53.1 (3570)	9-27	2.9	3.3	18.5
Nebsoy	51.5 (3460)	9-26	1.3	2.9	19.4
Beeson	43.3 (2910)	9-26	3.3	3.0	20.6
Sloan	44.8 (3010)	9-26	3.6	3.1	18.3
Wayne	46.8 (3150)	9-28	3.1	3.4	19.7
Woodworth	49.9 (3360)	10-2	2.0	2.5	17.2
Cumberland	46.9 (3150)	10-7	2.5	3.1	20.5
Oakland	48.1 (3240)	10-2	2.0	2.8	20.7
Calland	43.4	10-4	3.0	2.8	18.3
Elf	53.2 (3580)	10-9	1.0	1.9	19.2
Williams	48.4 (3260)	10-7	1.5	2.3	18.7
Union	42.8 (2880)	10-10	2.0	2.6	20.3
Bonus	44.0 (2960)	10-11	2.4	3.0	18.2
Cutler 71	44.5 (2990)	10-9	2.0	2.9	16.9
Dif. sig.	8.9 ( 599)	2.7	0.8	0.5	1.3

Saunders County

Planted May 26. 7-inch (18 cm) rows. Sprinkler irrigated.

Table 9. Soybean variety test. Mead Field Laboratory. Nonirrigated. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality score	Grams 100 seeds
Coles	34.9 (2350)	9-9	2.6	44 (112)	2.3	15.3
Corsoy	38.8 (2610)	9-8	2.4	44 (112)	2.4	13.3
Vickery	39.2 (2640)	9-7	2.5	43 (109)	2.3	13.1
Harcor	40.2 (2700)	9-8	2.3	44 (112)	2.4	13.0
Wells	36.6 (2460)	9-8	1.0	41 (104)	2.8	13.7
Wells II	38.2 (2570)	9-7	1.0	41 (104)	2.8	14.1
Amsoy 71	33.5 (2250)	9-10	3.1	46 (117)	2.9	13.8
Nebsoy	37.9 (2550)	9-9	1.1	38 (97)	2.6	14.8
Beeson	34.7 (2330)	9-10	1.5	41 (104)	2.8	15.2
Sloan	32.5 (2190)	9-12	2.5	40 (102)	2.9	14.1
Wayne	34.4 (2310)	9-19	1.9	44 (112)	2.6	14.6
Woodworth	34.0 (2290)	9-19	1.1	40 (102)	2.5	13.1
Cumberland	38.9 (2620)	9-19	1.4	39 (99)	2.6	16.5
Oakland	34.5 (2320)	9-19	1.4	43 (109)	2.1	15.2
Calland	30.9 (2080)	9-19	1.4	44 (112)	2.6	14.8
Elf	33.3 (2240)	9-25	1.0	31 (79)	1.8	13.4
Williams	34.3 (2310)	9-24	1.3	42 (107)	2.0	15.4
Union	32.3 (2170)	9-24	1.5	46 (117)	2.4	15.8
Bonus	27.7 (1860)	9-25	1.6	49 (124)	2.9	14.8
Cutler 71	30.5 (2050)	9-23	1.5	47 (119)	2.4	14.5
Dif. sig.	3.3 (222)	1.7	0.5	2.4 (61)	0.5	0.9

Saunders County

Planted May 26. 30-inch (76 cm) rows.



Table 10. Soybean variety test. Mead Field Laboratory. Irrigated. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality score	Grams 100 seeds
Coles	38.5 (2590)	9-13	3.0	43 (109)	2.4	15.9
Corsoy	47.7 (3210)	9-15	2.3	43 (109)	2.6	14.6
Vickery	46.9 (3150)	9-17	2.8	43 (109)	2.3	14.7
Harcor	47.1 (3170)	9-20	3.0	43 (109)	2.5	14.5
Wells	42.7 (2870)	9-12	1.5	41 (104)	2.9	15.5
Wells II	45.8 (3080)	9-14	1.4	41 (104)	2.8	15.9
Amsoy 71	40.0 (2690)	9-22	2.6	45 (114)	2.8	16.4
Nebsoy	45.3 (3050)	9-20	1.4	37 (94)	3.0	15.9
Beeson	38.1 (2560)	9-16	1.9	41 (104)	2.8	16.1
Sloan	44.1 (2970)	9-25	3.6	43 (109)	2.8	16.0
Wayne	40.7 (2740)	9-26	2.6	43 (109)	3.1	16.9
Woodworth	44.8 (3010)	9-26	2.0	42 (107)	2.4	15.3
Cumberland	46.0 (3090)	9-26	1.9	41 (104)	2.8	18.1
Oakland	41.2 (2770)	9-25	1.8	42 (107)	2.5	17.4
Calland	36.9 (2480)	9-27	2.0	46 (116)	2.9	16.6
Elf	51.7 (3480)	10-1	1.0	24 (61)	1.8	16.6
Williams	41.0 (2760)	10-1	2.0	43 (109)	2.1	17.5
Union	37.6 (2530)	10-6	2.9	46 (117)	2.5	18.0
Bonus	34.1 (2290)	10-7	1.9	52 (132)	3.4	15.9
Cutler 71	37.4 (2520)	10-7	2.0	48 (122)	2.8	16.7
Dif. sig.	4.4 (296)	3.9	0.7	3.0 (8)	0.5	1.3

Saunders County

Planted May 26. 30-inch (91 cm) rows. Furrow irrigated.

Table 11. Southeast District soybean variety tests. Mead Field Laboratory. Nonirrigated. 1973-1978.

Variety	Grain yield, bu/A (kg/ha)							1975-78 average				
	1973	1974	1975	1976	1977	1978	1975-78 average	Mature date	Ldg. score	Height in (cm)	Seed quality	Grams 100 seeds
Coles	----	----	----	----	----	34.9 (2350)	----	----	---	--	---	----
Corsoy	40.5 (2720)	31.3 (2110)	27.8 (1870)	28.7 (1930)	24.0 (1610)	38.8 (2610)	29.8 (2000)	9-13	1.7	33 (84)	2.8	14.6
Vickery	----	----	----	----	27.5 (1850)	39.2 (2640)	----	----	---	--	---	----
Harcor	----	----	32.2 (2170)	25.7 (1730)	29.2 (1960)	40.2 (2700)	31.8 (2140)	9-14	1.7	34 (86)	3.0	14.6
Wells	----	33.4 (2250)	26.8 (1800)	25.1 (1690)	26.4 (1780)	36.6 (2460)	28.7 (1930)	9-13	1.0	30 (76)	3.3	16.2
Wells II	----	----	----	----	----	38.2 (2570)	----	----	---	--	---	----
Amsoy 71	43.7 (2940)	38.0 (2560)	33.9 (2280)	24.1 (1620)	31.2 (2100)	33.5 (2250)	30.7 (2060)	9-15	1.7	36 (91)	3.1	15.6
Nebsoy	----	----	----	23.4 (1570)	29.2 (1960)	37.9 (2550)	----	----	---	--	---	----
Beeson	44.8 (3010)	33.7 (2270)	35.0 (2350)	20.2 (1360)	33.6 (2260)	34.7 (2330)	30.9 (2080)	9-16	1.3	33 (84)	2.7	18.1
Sloan	----	----	----	----	32.8 (2210)	32.5 (2190)	----	----	---	--	---	----
Wayne	46.2 (3110)	40.6 (2730)	33.8 (2270)	13.1 ( 880)	35.2 (2370)	34.4 (2310)	29.1 (1960)	9-20	1.4	34 (86)	2.6	15.6
Woodworth	47.6 (3200)	39.5 (2660)	30.4 (2040)	16.1 (1080)	37.5 (2520)	34.0 (2290)	29.5 (1980)	9-21	1.0	33 (84)	2.2	13.8
Cumberland	----	----	----	----	35.4 (2380)	38.9 (2620)	----	----	---	--	---	----
Oakland	----	----	----	----	32.3 (2170)	34.5 (2320)	----	----	---	--	---	----
Calland	41.0 (2760)	40.5 (2720)	36.0 (2420)	17.5 (1180)	35.6 (2390)	30.9 (2080)	30.0 (2020)	9-25	1.2	35 (89)	2.7	16.7
Elf	----	----	----	----	35.2 (2370)	33.3 (2240)	----	----	---	--	---	----
Williams	46.7 (3140)	39.2 (2640)	39.6 (2660)	17.8 (1200)	33.7 (2270)	34.3 (2310)	31.4 (2110)	9-27	1.1	35 (89)	1.7	15.9
Union	----	----	----	----	39.1 (2630)	32.3 (2170)	----	----	---	--	---	----
Bonus	42.9 (2890)	36.9 (2480)	36.9 (2480)	15.8 (1060)	36.0 (2420)	27.7 (1860)	29.1 (1960)	9-26	1.3	39 (99)	2.3	15.4
Cutler 71	40.2 (2700)	39.1 (2630)	34.4 (2310)	12.8 ( 860)	37.8 (2540)	30.5 (2050)	28.9 (1940)	9-27	1.4	38 (97)	2.1	15.3
Dif. sig.	4.2 ( 282)	6.0 ( 404)	4.8 ( 323)	5.0 ( 336)	6.5 ( 437)	3.3 ( 222)	N.S.	3.6	0.5	2.6 ( 6)	0.5	1.2

30-inch (76 cm) rows.



Table 12. Southeast District soybean variety tests. Mead Field Laboratory. Irrigated. 1973-1978.

Variety	Grain yield, bu/A (kg/ha)							1975-78 average				
	1973	1974	1975	1976	1977	1978	1975-78 average	Mature date	Ldg. score	Height in (cm)	Seed quality	Grams 100 seeds
Coles	----	----	----	----	----	38.5 (2590)	----	----	---	--	---	----
Corsoy	43.8 (2950)	45.9 (3090)	48.0 (3230)	43.6 (2930)	43.2 (2910)	47.7 (3210)	45.6 (3070)	9-18	2.3	41 (104)	2.2	15.0
Vickery	----	----	----	----	36.5 (2450)	46.9 (3150)	----	----	---	--	---	----
Harcor	----	----	49.0 (3300)	39.7 (2670)	42.2 (2840)	47.1 (3170)	44.5 (2990)	9-20	2.4	41 (104)	2.2	14.7
Wells	55.2 (3710)	43.0 (2890)	40.9 (2750)	38.2 (2570)	42.7 (2870)	42.7 (2870)	41.1 (2760)	9-17	1.5	40 (102)	2.5	15.7
Wells II	----	----	----	----	----	45.8 (3080)	----	----	---	--	---	----
Amsoy 71	50.3 (3380)	38.3 (2580)	45.6 (3070)	32.9 (2210)	43.1 (2900)	40.0 (2690)	40.4 (2720)	9-21	2.3	45 (114)	2.5	15.6
Nebsoy	----	----	----	----	49.4 (3320)	45.3 (3050)	----	----	---	--	---	----
Beeson	47.3 (3180)	41.2 (2770)	42.3 (2850)	35.2 (2370)	46.8 (3150)	38.1 (2560)	40.6 (2730)	9-20	1.7	39 ( 99)	2.1	17.2
Sloan	----	----	----	----	42.3 (2850)	44.1 (2970)	----	----	---	--	---	----
Wayne	47.0 (3160)	34.1 (2290)	41.3 (2780)	31.8 (2140)	42.7 (2870)	40.7 (2740)	39.1 (2630)	9-27	2.0	42 (107)	2.2	16.5
Woodworth	51.2 (3440)	37.6 (2530)	41.5 (2790)	39.1 (2630)	45.7 (3070)	44.8 (3010)	42.8 (2880)	9-26	1.6	42 (107)	1.8	14.6
Cumberland	----	----	----	----	51.5 (3460)	46.0 (3090)	----	----	---	--	---	----
Oakland	----	----	----	----	45.0 (3030)	41.2 (2770)	----	----	---	--	---	----
Calland	48.0 (3230)	36.1 (2430)	37.5 (2520)	34.2 (2300)	43.6 (2930)	36.9 (2480)	38.1 (2560)	9-29	1.9	45 (114)	2.2	15.9
Elf	----	----	----	----	41.9 (2820)	51.7 (3480)	----	----	---	--	---	----
Williams	48.2 (3240)	31.1 (2090)	44.2 (2970)	34.0 (2290)	42.7 (2870)	41.0 (2760)	40.5 (2720)	10-2	1.6	43 (109)	1.6	16.5
Union	----	----	----	----	43.2 (2910)	37.6 (2530)	----	----	---	--	---	----
Bonus	45.7 (3070)	28.3 (1900)	33.6 (2260)	33.0 (2220)	38.0 (2560)	34.1 (2290)	34.7 (2330)	10-3	2.0	50 (127)	2.2	15.7
Cutler 71	41.4 (2780)	31.1 (2090)	34.8 (2340)	33.6 (2260)	40.7 (2740)	37.4 (2520)	36.6 (2460)	10-4	1.9	47 (119)	2.0	16.5
Dif. sig.	5.8 ( 390)	6.6 ( 443)	4.7 ( 316)	5.3 ( 356)	5.2 ( 350)	4.4 ( 296)	3.8 ( 256)	2.9	0.4	2.2 ( 6 )	0.4	0.6

30 inch (76 cm) rows.

Table 13. Soybean variety test. Lancaster County. Irrigated. 1976-1977.

Variety	1977						1976-77 average
	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality score	Grams 100 seeds	Yield bu/A (kg/ha)
Corsoy	57.7 (3880)	9-14	2.1	38 ( 97)	2.5	17.7	52.5 (3530)
Vickery	55.3 (3720)	9-14	2.8	38 ( 97)	2.9	17.2	-----
Harcor	61.6 (4140)	9-16	2.5	42 (107)	3.0	17.8	55.4 (3730)
Wells	57.5 (3870)	9-17	1.9	47 (119)	2.6	17.7	52.7 (3540)
Amsoy 71	59.0 (3970)	9-23	2.8	50 (127)	3.4	18.3	52.1 (3500)
Nebsoy	69.2 (4650)	9-22	1.6	44 (112)	2.3	19.7	-----
Beeson	62.5 (4200)	9-25	2.3	47 (119)	2.0	20.4	52.6 (3540)
Sloan	69.5 (4670)	9-25	3.0	42 (107)	2.1	18.4	-----
Wayne	61.3 (4120)	9-28	3.3	52 (132)	2.4	20.5	50.0 (3360)
Woodworth	56.9 (3830)	10-6	2.6	48 (122)	1.9	18.1	51.1 (3440)
Cumberland	68.7 (4620)	9-30	2.6	44 (112)	2.1	20.9	-----
Oakland	62.6 (4210)	10-9	2.0	46 (117)	2.0	20.2	-----
Calland	52.2 (3510)	10-13	2.9	57 (145)	2.0	18.4	43.7 (2940)
Williams	64.9 (4370)	10-13	2.4	53 (135)	1.9	20.2	50.3 (3380)
Union	62.0 (4220)	10-11	3.0	54 (137)	2.0	20.5	-----
Bonus	52.7 (3540)	10-17	2.3	62 (157)	1.9	18.7	44.4 (2990)
Cutler 71	58.6 (3940)	10-18	2.4	55 (140)	2.1	19.9	44.4 (2990)
Kent	43.1 (2900)	10-19	2.3	50 (127)	2.0	17.8	36.5 (2450)
Dif. sig.	7.6 ( 511)	5.7	0.5	5.0 ( 13)	0.3	1.2	10.0 ( 673)

Nebraska Agricultural Experiment Station Farm.

Planted: May 13, 1977. 30-inch (76 cm) rows. No 1978 data (hailed).



Table 14. Soybean variety test. Nemaha County. 1978.

Variety	Yield bu/A (kg/ha)	Lodging score	Height inches (cm)	Grams 100 seeds
Wells	44.6 (3000)	2.8	45 (114)	14.2
Amsoy 71	46.6 (3130)	3.5	50 (127)	14.5
Nebsoy	49.9 (3360)	1.8	42 (107)	16.6
Sloan	42.9 (2890)	4.5	42 (107)	14.9
Wayne	46.5 (3130)	3.8	46 (117)	15.2
Woodworth	49.4 (3320)	2.5	45 (114)	13.2
Cumberland	51.0 (3430)	2.8	44 (112)	17.1
Oakland	48.5 (3260)	2.5	44 (112)	16.3
Calland	42.5 (2860)	3.3	48 (122)	14.9
Elf	46.4 (3120)	1.0	24 (61)	14.1
Williams	42.9 (2890)	2.8	47 (119)	14.8
Union	42.4 (2850)	3.0	51 (130)	15.7
Bonus	44.9 (3020)	3.3	53 (135)	14.3
Cutler 71	41.5 (2790)	2.5	50 (127)	13.6
Kent	35.9 (2410)	2.0	47 (119)	13.8
Dif. sig.	5.7 (383)	0.8	2.9 (7)	0.8

Cooperator: Fred Gauchat, Brock

Planted: May 22, 30-inch (76 cm) rows

Harvested: September 26. All mature.

Table 15. Southeast District soybean variety tests. Nemaha County. 1971-1978. No 1977 data.

Variety	Grain yield, bu/A (kg/ha)								1973-78 average		
	1971	1972	1973	1974	1975	1976	1978	1973-78 average	Ldg. score	Height in (cm)	Grams 100 seeds
Wells	----	----	----	----	22.9 (1540)	40.9 (2750)	44.6 (3000)	----	---	---	----
Amsoy 71	20.8 (1400)	52.8 (3550)	37.6 (2530)	38.7 (2600)	26.2 (1760)	36.8 (2480)	46.6 (3130)	37.2 (2500)	2.4	42 (107)	15.3
Nebsoy	----	----	----	----	----	44.5 (2990)	49.9 (3360)	----	---	---	----
Sloan	----	----	----	----	----	----	42.9 (2890)	----	---	---	----
Wayne	30.5 (2050)	57.8 (3890)	43.0 (2890)	42.6 (2870)	21.8 (1470)	36.9 (2480)	46.5 (3130)	38.2 (2570)	2.8	40 (102)	16.8
Woodworth	----	----	44.4 (2990)	46.0 (3090)	32.1 (2160)	36.6 (2460)	49.4 (3320)	41.7 (2800)	2.0	40 (102)	15.1
Cumberland	----	----	----	----	----	----	51.0 (3430)	----	---	---	----
Oakland	----	----	----	----	----	----	48.5 (3260)	----	---	---	----
Calland	30.5 (2050)	56.6 (3810)	40.3 (2710)	44.1 (2970)	27.2 (1830)	32.4 (2180)	42.5 (2860)	37.3 (2510)	2.4	41 (104)	17.5
Elf	----	----	----	----	----	----	46.4 (3120)	----	---	---	----
Williams	33.3 (2240)	59.9 (4030)	47.8 (3220)	46.4 (3120)	33.1 (2230)	33.2 (2230)	42.9 (2890)	40.7 (2740)	2.3	41 (104)	16.4
Union	----	----	----	----	----	----	42.4 (2850)	----	---	---	----
Bonus	30.8 (2070)	62.3 (4190)	45.8 (3080)	42.5 (2860)	32.2 (2170)	32.2 (2170)	44.9 (3020)	39.5 (266)	2.3	46 (117)	16.6
Cutler 71	27.0 (1820)	56.4 (3790)	43.4 (2920)	44.2 (2970)	36.8 (2480)	32.9 (2210)	41.5 (2790)	39.8 (2680)	2.5	43 (109)	16.8
Kent	26.7 (1800)	51.1 (3440)	38.7 (2600)	37.0 (2490)	35.3 (2370)	39.7 (2670)	35.9 (2410)	37.3 (2510)	2.0	41 (104)	15.8
Dif. sig.	4.8 ( 323)	6.4 ( 430)	4.9 ( 330)	5.0 ( 336)	9.2 ( 619)	3.9 ( 262)	5.7 ( 383)	N.S.	0.5	2.3 ( 6)	1.4



Table 16. Soybean variety test. Fillmore County. Irrigated. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality	Grams 100 seeds
Coles	38.7 (2600)	9-9	3.5	38 ( 97)	1.3	19.1
Corsoy	38.8 (2610)	9-10	1.5	33 ( 84)	1.5	18.4
Vickery	38.9 (2620)	9-10	2.0	33 ( 84)	1.3	18.1
Harcor	42.8 (2880)	9-10	2.0	34 ( 86)	1.0	16.9
Wells	46.3 (3110)	9-11	1.3	34 ( 86)	1.3	16.6
Amsoy 71	48.9 (3290)	9-14	1.5	38 ( 97)	1.5	16.9
Nebsoy	46.4 (3120)	9-16	1.3	32 ( 81)	1.0	18.7
Beeson	35.7 (2400)	9-15	3.0	35 ( 89)	1.3	18.7
Sloan	44.0 (2960)	9-15	3.3	34 ( 86)	1.5	17.8
Wayne	55.0 (3700)	9-20	2.5	39 ( 99)	1.0	18.5
Woodworth	51.8 (3480)	9-20	2.0	36 ( 91)	1.3	16.8
Cumberland	52.7 (3540)	9-19	2.0	35 ( 89)	1.0	19.5
Oakland	60.3 (4060)	9-20	1.8	35 ( 89)	1.3	19.1
Calland	56.3 (3790)	9-22	2.8	42 (107)	1.0	19.2
Elf	36.1 (2430)	9-24	1.0	20 ( 51)	1.0	19.3
Williams	52.1 (3500)	9-22	2.3	39 ( 99)	1.0	18.0
Dif. req. sig.	6.6 ( 444)	2.0	0.7	3.1 ( 8 )	N.S.	1.0

Cooperator: Bettger Bros., Fairmont.

Planted: May 16, 36-inch (91 cm) rows. Furrow irrigated.

Harvested: October 6.

Table 17. Soybean variety test. South Central Station. Furrow irrigated. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality	Grams 100 seeds
Coles	45.2 (2860)	9-13	2.5	40 (102)	1.0	18.5
Corsoy	47.1 (3170)	9-12	1.8	39 (99)	1.3	17.3
Vickery	41.8 (2810)	9-14	2.5	37 (94)	1.3	16.3
Harcor	47.5 (3190)	9-9	2.5	38 (97)	1.8	16.1
Wells	46.2 (3110)	9-14	1.3	39 (99)	2.0	16.3
Amsoy 71	46.9 (3150)	9-17	2.3	42 (107)	1.0	17.6
Nebsoy	49.5 (3330)	9-18	1.8	35 (89)	2.0	19.1
Beeson	49.3 (3320)	9-20	2.8	38 (97)	1.3	19.2
Sloan	56.8 (3820)	9-18	2.5	38 (97)	1.3	18.5
Wayne	49.4 (3320)	9-23	2.5	40 (102)	1.0	20.2
Woodworth	54.4 (3660)	9-24	2.5	38 (97)	1.0	17.8
Cumberland	52.7 (3540)	9-24	2.3	39 (99)	1.0	21.3
Oakland	64.3 (4320)	9-23	2.0	39 (99)	1.0	19.8
Calland	58.3 (3920)	9-26	2.8	44 (112)	1.0	19.3
Elf	57.2 (3850)	9-27	1.0	21 (53)	2.0	19.6
Williams	60.3 (4060)	9-26	2.5	43 (109)	1.0	20.0
Dif. req. sig.	5.1 (343)	2.6	0.7	2.6 (7)	0.3	0.7

Clay County

Planted: May 17, 30-inch (76 cm) rows. Furrow irrigated.

Harvested: October 2-3.



Table 18. Soybean variety test. South Central Station. Sprinkler irrigated. 1978.

Variety	Yield bu/A (kg/ha)	Mature date	Lodging score	Height inches (cm)	Seed quality	Grams 100 seeds
Coles	45.5 (3060)	9-21	2.8	38 (97)	1.0	18.6
Corsoy	43.1 (2900)	9-21	2.5	33 (84)	1.0	17.0
Vickery	38.6 (2600)	9-20	3.8	34 (86)	1.5	16.5
Harcor	40.3 (2710)	9-21	3.0	35 (89)	1.0	16.9
Wells	50.9 (3420)	9-22	1.3	36 (91)	1.5	17.1
Amsoy 71	36.7 (2470)	9-23	3.0	35 (89)	1.0	17.4
Nebsoy	46.6 (3130)	9-22	1.8	34 (86)	1.5	19.0
Beeson	34.7 (2330)	9-24	3.5	35 (89)	1.0	18.6
Sloan	54.0 (3630)	9-23	2.5	37 (94)	1.5	18.4
Wayne	42.8 (2880)	9-22	2.0	39 (99)	1.3	15.7
Woodworth	42.5 (2860)	9-22	1.5	37 (94)	1.0	13.9
Cumberland	40.0 (2690)	9-22	1.0	34 (86)	1.0	15.6
Oakland	42.9 (2890)	9-23	1.3	38 (97)	1.3	15.5
Calland	42.0 (2820)	9-24	1.3	39 (99)	1.5	14.4
Elf	40.8 (2740)	9-23	1.0	21 (53)	1.0	14.6
Williams	36.4 (2450)	9-24	1.3	39 (99)	1.0	14.2
Dif. req. sig.	7.5 ( 504)	0.4	0.7	2.7 ( 7)	1.1	1.1

Clay County

Planted: May 18, 30 inch (76 cm) rows. Sprinkler irrigated.

Harvested: October 3.

Table 19. South Central soybean variety tests. Irrigated. 1972-1978.

Variety	Grain yield, bu/A (kg/ha)								1975-78 average		
	1972	1973	1974	1975	1976	1977	1978	1975-78 average	Lodging score	Height in (cm)	Grams 100 seeds
Coles	----	----	----	----	----	----	42.2 (2970)	----	---	--	----
Corsoy	65.6 (4410)	58.7 (3950)	54.4 (3660)	45.8 (3080)	34.3 (2310)	50.9 (3420)	43.0 (2890)	43.5 (2930)	2.5	35 ( 89)	17.1
Vickery	----	----	----	----	----	----	39.8 (2680)	----	---	--	----
Harcor	----	----	----	45.9 (3090)	39.8 (2680)	55.7 (3750)	43.5 (2930)	46.2 (3110)	2.7	38 ( 97)	16.7
Wells	63.2 (4250)	53.6 (3610)	46.4 (3120)	43.8 (2950)	50.1 (3370)	48.7 (3280)	47.8 (3220)	47.6 (3200)	1.8	36 ( 91)	17.1
Amsoy 71	62.0 (4170)	63.5 (4270)	50.9 (3420)	40.3 (2710)	44.1 (2970)	58.5 (3930)	44.2 (2970)	46.8 (3150)	2.2	42 (107)	17.4
Nebsoy	----	----	----	----	----	----	47.5 (3190)	----	---	--	----
Beeson	57.4 (3860)	52.5 (3530)	42.7 (2870)	43.8 (2950)	50.5 (3400)	47.8 (3220)	39.9 (2680)	45.5 (3060)	2.5	37 ( 94)	19.3
Sloan	----	----	----	----	----	----	51.6 (3470)	----	---	--	----
Wayne	56.1 (3770)	51.2 (3440)	43.8 (2950)	40.0 (2690)	45.6 (3070)	50.6 (3400)	49.1 (3300)	46.3 (3110)	2.3	39 ( 99)	18.2
Woodworth	----	----	53.0 (3560)	47.7 (3210)	56.7 (3810)	66.7 (4490)	49.6 (3340)	55.2 (3710)	2.0	38 ( 97)	16.6
Cumberland	----	----	----	----	----	----	48.5 (3260)	----	---	--	----
Oakland	----	----	----	----	----	----	55.8 (3750)	----	---	--	----
Calland	57.6 (3870)	56.5 (3800)	45.9 (3090)	36.0 (2420)	60.9 (4100)	61.6 (4140)	52.2 (3510)	52.7 (3540)	2.7	41 (104)	18.2
Elf	----	----	----	----	----	----	44.7 (3010)	----	---	--	----
Williams	53.8 (3620)	58.6 (3940)	47.6 (3200)	41.9 (2820)	48.3 (3250)	59.9 (4030)	49.6 (3340)	49.9 (3360)	1.8	39 ( 99)	18.0
Dif. sig. (.05)	N.S.	4.5 ( 303)	6.0 ( 404)	N.S.	9.6 ( 646)	8.1 ( 545)	N.S.	N.S.	N.S.	2.5 ( 6 )	1.1

1972-1976 Clay County; 1977 Fillmore County; 1978 Fillmore and Clay (2 tests) counties.



Table 20. Soybean variety test. Rock County. Irrigated. 1978.

Variety	Yield bu/A (kg/ha)	Height inches (cm)	Grams 100 seeds
Hodgson	32.2 (2230)	25 (64)	14.2
Coles	30.5 (2050)	29 (74)	15.0
Harcor	30.2 (2030)	28 (71)	11.7
Wells	30.6 (2060)	31 (79)	12.7
Amsoy 71	29.1 (1960)	35 (89)	12.9
Nebsoy	32.1 (2160)	29 (74)	14.2
Beeson	30.8 (2070)	33 (84)	14.5
Sloan	34.3 (2310)	31 (79)	13.1
Dif. req. sig. (.05)	N.S.	3.3 (8)	1.0

Cooperator: Frank Svoboda, Newport

Planted: June 8, 30-inch (76 cm) rows. Sprinkler irrigated.

Harvested: November 11.

Table 21. Southwest District irrigated soybean variety tests. 1967-1977. 1/

Variety	Grain yield, bu/A (kg/ha)									1974-77 average	
	1967	1968	1969	1970	1971	1974	1975	1977	1974-77 average	Height in (cm)	Grams 100 seeds
Hark	39.2 (2640)	47.9 (3220)	51.0 (3430)	55.1 (3710)	40.2 (2700)	41.0 (2760)	42.1 (2830)	-----	-----	--	-----
Corsoy	41.2 (2770)	55.6 (3740)	48.0 (3230)	61.9 (4160)	46.2 (3110)	42.2 (2840)	46.4 (3120)	39.6 (2660)	42.7 (2870)	30 (76)	15.7
Harcor	-----	-----	-----	-----	-----	-----	48.3 (3250)	54.3 (3650)	-----	--	-----
Wells	-----	-----	-----	-----	-----	36.4 (2450)	44.2 (2970)	46.9 (3150)	42.5 (2860)	28 (71)	15.3
Amsoy 71	-----	-----	-----	52.6 (3540)	48.6 (3270)	39.7 (2670)	46.3 (3110)	53.0 (3560)	46.3 (3110)	31 (79)	15.5
Beeson	-----	45.9 (3090)	52.0 (3500)	60.8 (4090)	49.7 (3340)	35.4 (2380)	45.1 (3030)	48.5 (3260)	43.0 (2890)	32 (81)	16.8
Wayne	39.4 (2650)	47.0 (3160)	48.5 (3260)	51.5 (3460)	37.7 (2540)	35.3 (2370)	37.9 (2550)	48.6 (3270)	40.6 (2730)	32 (81)	14.9
Woodworth	-----	-----	-----	-----	-----	34.8 (2340)	39.6 (2660)	51.7 (3480)	42.0 (2820)	32 (81)	13.2
Calland	-----	48.6 (3270)	50.7 (3410)	55.1 (3710)	42.4 (2850)	37.2 (2500)	-----	46.0 (3090)	-----	34 (86)	-----
Williams	-----	-----	-----	-----	40.8 (2740)	33.7 (2270)	41.6 (2800)	44.9 (3020)	40.1 (2700)	31 (79)	15.0
Dif. sig.	-----	N.S.	6.1 ( 410)	6.1 ( 410)	N.S.	4.4 ( 296)	5.9 ( 397)	7.1 ( 478)	N.S.	N.S.	1.3

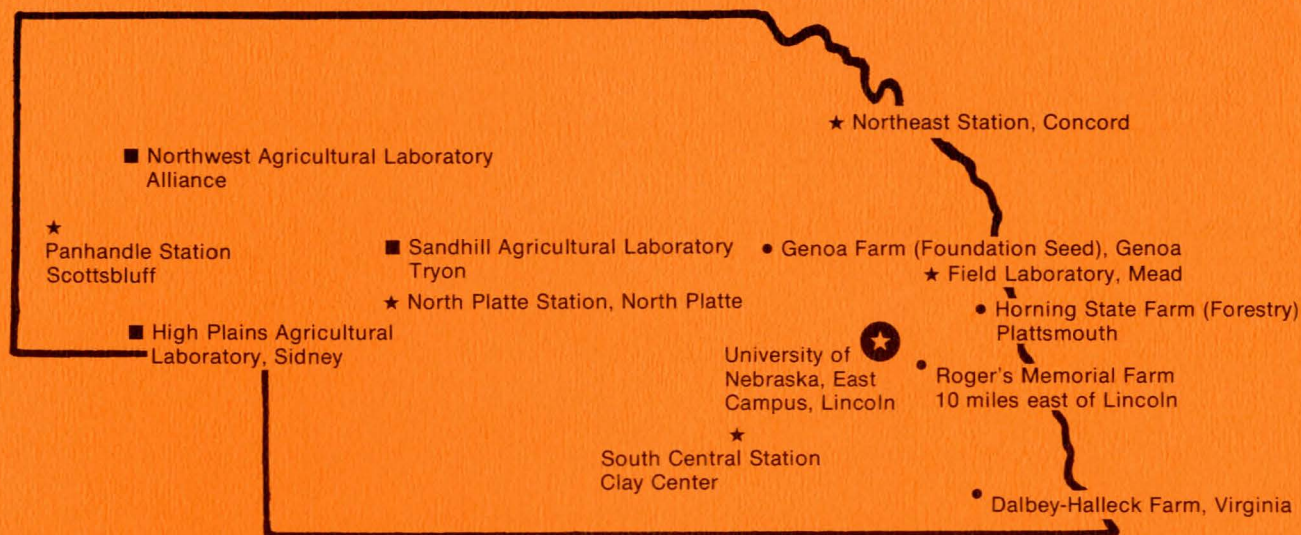
1/ No height data in 1975.

No data: 1972, 1973, 1976, 1978.

1967-1971 Lincoln County; 1974 Frontier County; 1975 Dawson County; 1977 Lincoln County.



## Agricultural Research for All of Nebraska



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